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APPENDIX B

PHOTOGRAPHIC AND TELEVISION SERVICES GUIDE

1. PHOTOGRAPHIC SUPPORT

NASA JSC photographers provide photographic support as required for test documentation or analysis purposes. The user requests NASA photographic service by including the request in the test package submission. Included with the photographers are:

- Camera, lights, and other photographic equipment
- Expendable supplies (film, etc.)
- Processing and finishing (printing)
- Viewing and analysis facilities

The following four categories of photographic services are available:

A. Still Photography--Documentary

Documentary still photography is performed using high-resolution digital cameras. Customers are able to view the still images immediately after the flight. Selected images from the week's flight will be placed on the Internet for viewing, downloading or printing by the customer.

Digital 8" x 10" color prints will be available in limited quantities based on customer requests.

B. Still Photography--Scientific

The photographers utilize special equipment for scientific or public relations photography if requested by the user. Hasselblad medium format and Nikon 35mm cameras can be equipped to handle a variety of photographic situations.

C. Motion Picture--Documentary

Documentary motion pictures are filmed in 16mm format, either with or without synchronous sound. The Photographic Branch is able to cover a large range of documentary situations, from simple available-light situations to multiple light set-ups.

NASA/JSC is not able to provide processing and prints of the 16mm motion picture film.

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D. Motion Picture--Instrumentation (Scientific)

Motion picture photographic instrumentation uses the motion picture photographic system as an instrument to capture information which may not be accessible, due to high speed or other factors, to the human visual system or to other instrumentation.

The Photographic Branch uses high speed or time-lapse motion picture cameras for most instrumentation applications. These cameras provide the required compression or expansion of time so that experimental data can be recorded in a form which is readily accessible.

The photographers are available to set viewing times, usually in Building 8 at JSC, if the user requires viewing facilities or assistance in analyzing the photographic data.

2. TELEVISION SUPPORT

NASA JSC television personnel provide support as required for test documentation or analysis purposes. Users request television imaging-capture support by including requests for NASA television service in the test equipment data package.

Television support personnel are equipped for each flight based on the requirements for support of a particular test. Equipment can include:

- Standard video camcorders in MII (high quality) or SVHS, VHS, 8mm or hi-8mm
- Video tape stock for required equipment
- Battery and AC operated color monitors for in-flight viewing
- High speed monochrome television camera/recorder.

S-band downlink is now available. At present, capability for single video channel, single downlink and UHF voice uplink is available. Other television capabilities are also available, and are described in the following paragraphs

A. Documentation

Television coverage for documentation purposes can be provided in any format as indicated above but must be requested in advance of flight. Generally, existing light levels are adequate to support television documentation. Additional battery operated lights are available upon request in advance.

B. Instrumentation or Scientific

Television imaging of specific instruments or experiment processes, not easily discernible by the human eye, can either be captured in high speed monochrome video or in standard speed color video with slow-motion playback later.

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C. Video Copies

The original camera video tape is kept on file in the Reduced Gravity Office. The user will be provided with one copy. With advanced notice, copies of the video tape device can be made over night, if necessary. Windowed (with the time code printed in the picture) copies can be generated, provided that the video is recorded on a device that has a recorded time code signal. If a time code is present, it will usually be Society of Motion Picture and Television Engineers Standard Code.

D. Special Services

Viewing of in-flight recordings can be prearranged for after the flight at the Reduced Gravity Office.

Full viewing facilities are also available at the Imagery Services Branch facilities in Building 8 at JSC. Editing capabilities also exist at JSC, and arrangements for such support should be made well in advance.

Video still prints can be acquired after the flight through the Imagery Services group. Standard 5 x 7 inch color prints can be provided from the video tape. Arrangements should be made in advance for this service.

Special requirements for each flight, such as wide angle lenses or specially mounted cameras on test objects, can be accommodated if arranged in advance. Multiple television cameras of different viewing angles at the same time can also be arranged.

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